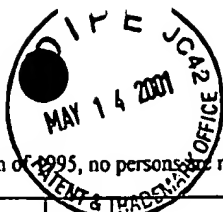


Please type a plus sign (+) inside the box ☒



U.S. Patent & Trademark Office: U.S. DEPARTMENT OF COMMERCE

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-003

Under the Paperwork Reduction Action of 1995, no person is required to respond to a collection of information unless it contains a valid OMB number.

Substitute for form 1443A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets necessary)				COMPLETE IF KNOWN	
				Application Number	09/724,179
				Filing Date	November 28, 2000
				First Named Inventor	WENHUA LIN
				Group Art Unit	2633
				Examiner Name	Unknown
SHEET	1	OF	1	Docket Number	LIGHT1320

RECEIVED
 MAY 16 2001
 Technology Center 1600

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (If known)			

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (If known)				
NC	1	EP	0985942A2		Lucent Technologies, Inc.	03/15/2000		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ⁶
MC	2	H. OKAYAMA et al., <i>Dynamic Wavelength Selective Add/Drop Node Comprising Tunable Gratings</i> , 2 pgs.	
MC	3	2000 Optical Components, Santec Corporation, 4 pgs	

Examiner Signature		Date Considered	6/20/06
--------------------	--	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two letter-code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

Please type a plus sign (+) inside the box ☒

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-003
U.S. Patent & Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Action of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as required)		COMPLETE IF KNOWN	
		Application Number	09/24,179
		Filing Date	11/28/00
		First Named Inventor	Lin
		Group Art Unit	2874
		Examiner Name	Unknown
SHEET 1 OF 6	Docket Number	LIGHT1320	

U.S. PATENT DOCUMENTS

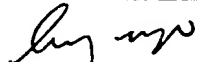
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (If known)			
lin	1	4,618,210		Kondo	10-21-1986	
lin	2	4,747,654		Yi-Yan	03-31-1988	
lin	3	4,813,757		Sakano et al.	03-21-1989	
lin	4	4,846,542		Okayama	07-11-1989	
lin	5	5,002,350		Dragone	03-26-1991	
lin	6	5,013,113		Soref	05-07-1991	
lin	7	5,039,993		Dragone	08-13-1991	
lin	8	5,243,672		Dragone	09-07-1993	
lin	9	5,412,744		Dragone	05-02-1995	
lin	10	5,450,511		Dragone	09-12-1995	
lin	11	5,467,418		Dragone	11-14-1995	
lin	12	5,581,643		Wu	12-03-1996	
lin	13	5,706,377		Li	01-06-1998	
lin	14	5,841,931		Foresi et al.	11-24-1998	
lin	15	5,938,811		Greene	08-17-1999	
lin	16	6,108,478		Harpon et al.	08-22-2000	
lin	17	6,118,909		Chen et al.	09-12-2000	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (If known)				
lin	18	EPO	0647861A1		AT&T Corp.	12.04.1995		
lin	19	EPO	0985942A2		Lucent Technologies, Inc.	15.03.2000		
lin	20	Japan	2-179621		Oki Electric Ind. Co. Ltd.	12.7.1990		
lin	21	Japan	6-186598		Hitachi Ltd.	8.7.1994		
lin	22	Japan	63-197923		NEC Corp.	16.8.1988		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ⁶
lin	23	ABE, et al., Optical Path Length Trimming Technique using Thin Film Heaters for Silica-Based Waveguides on Si, Electronics Letters, September 12, 1996, Vol. 32-No. 19, pp. 1818-1820.	
lin	24	ALBERT, J., Planar Fresnel Lens Photoimprinted in a Germanium-Doped Silica Optical Waveguide, Optics Letters, May 15, 1995, Vol. 20-No. 10, pp 1136-1138	
lin	25	AMAN, M.C., Calculation of Metal-Clad Ridge-Waveguide (MCRW) Laser Modes by Mode Coupling Technique, Journal of Lightwave Technology, VOL LT-4, No.6, June 1986, pg 689-693	

Examiner Signature		Date Considered	12/03/03
--------------------	---	-----------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two letter-code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

Gray Cary/GT6270915.1
2101501-165156

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB number.

Substitute for form 1443A/PTO		COMPLETE IF KNOWN	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets necessary)		Application Number	09/724,179
		Filing Date	11/28/00
		First Named Inventor	Lin
		Group Art Unit	2874
		Examiner Name	Unknown
SHEET	2	OF	6
		Docket Number	LIGHT1320

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ⁵
lin	26	AMANN, M.C. et al, <i>Calculation Of The Effective Refractive-Index Step For The Metal-Cladded-Ridge-Waveguide Laser</i> , Applied Optics, VOL 20, No.8, Apr 15 1981, pg 1483-1486	
lin	27	BABA, S. et al., <i>A Novel Integrated-Twin-Guide (ITG) Optical Switch with a Built-in TIR Region</i> , IEEE Photonics Technology Letters; VOL 4, No.5, May 1992, pg 486-488	
lin	28	BENSON, T.M., <i>Etched-Wall Bent-Guide Structure for Integrated Optics in the III-V Semiconductors</i> , Journal of Lightwave Technology, VOL LT-2, No.1, Feb 1984; pg 31-34	
lin	30	BERRY, G.M. et al., <i>Analysis Of Multiplayer Semiconductor Rib Waveguides With High Refractive Index Substrates</i> , Electronics Letters; VOL 29, No.22; Oct 28 1993, pg 1941-1942	
lin	31	BETTY, I. et al., <i>A Robust, Low-Crosstalk, InGaAsP/InP Total-Internal-Reflection Switch For Optical Cross-Connect Application</i>	
lin	32	BURKE, S.V., <i>Spectral Index Method Applied to Coupled Rib Waveguides</i> , Electronics Letters, VOL 25, No.9, Apr 27 1989, pg 605-606	
lin	33	BURNS, W.K. et al., <i>Mode Conversion in Planar-Dielectric Separating Waveguides</i> , IEEE Journal of Quantum Electronics, VOL QE-11, No.1, Jan 1975; pg 32-39	
lin	34	CAI, Y. et al., <i>A Novel Three-Guide Optical Coupler Using A Taper-Formed Waveguide</i> ; J. Appl. Phys 69(5), Mar 1991; pg 2810-2814	
lin	35	CAVAILLES, J.A. et al., <i>First Digital Optical Switch Based on InP/GaInAsP Double Heterostructure Waveguides</i> , Electronics Letters, VOL 27, No.9, Apr 25 1991, pg 699-700	
lin	36	CHEN, R.T. et al., <i>Design and Manufacturing of WDM Devices</i> , Proceedings of SPIE VOL 3234	
lin	37	CLEMENS, et al., <i>Wavelength-Adaptable Optical Phased Array in SiO₂-Si</i> , Photonics Technology Letters, October 1995, Vol. 7-No 10, 1040-1041.	
lin	38	DAGLI, N. et al., <i>Analysis of Rib Dielectric Waveguides</i> , IEEE Journal of Quantum Electronics, VOL QE-21, No.4, Apr 1985, Pg 315-321	
lin	39	DAGLI, N. et al., <i>Theoretical and Experimental Study of the Analysis and Modeling of Integrated Optical Components</i> , IEEE Journal of Quantum electronics, VOL 24, No.11, November 1988; pg 2215-2226	
lin	40	DERI, R.J., et al., <i>Low-Loss GaAs/AlGaAs Waveguide Phase Modulator Using A W- Shaped Index Profile</i> , Sep 6 1988	
lin	41	DERI, R.J., et al., <i>Low-Loss Multiple Quantum Well GaInAs/InP Optical Waveguides</i> , Feb 21, 1989	
lin	42	DEVAUX, F. et al., <i>20Gbit/s Operation of a High-Efficiency InGaAsP/InGaAsP MQW Electroabsorption Modulator With 1.2-V Drive Voltage</i> , IEEE Photonics Technology Letters, VOL 5, No.11, Nov 1993, pg 1288-1290	
lin	43	DOERR, C.R. et al., <i>Chirping Of The Waveguide Grating Router For Free-Spectral-Range Mode Selection In The Multifrequency Laser</i> , IEEE Photonics Technology Letters, April 1996, Vol. 8-No. 4, pp 500-502	
lin	44	DOERR, C.R. et al., <i>Chromatic Focal Plane Displacement in the Parabolic Chirped Waveguide Grating Router</i> , May 1997, Vol. 9-No. 5, pp 625-627	
lin	45	DRAGONE, c. <i>Efficient NxN Star Couplers Using Fourier Optics</i> , pg 479-48, March 1989, Vol. 7-No. 3, Journal of Lightwave Technology	
lin	46	FISCHER, et al., <i>Singlemode Optical Switches Based on SOI Waveguides with Large Cross-Section</i> , Electronics Letters, March 3, 1994, Vol. 30-No.5, pp. 406-408.	
lin	47	FISCHER, K. et al, <i>Sensor Application Of SiON Integrated Optical Waveguides On Silicon</i> , Elsevier Sequoia, 1992; pg 209-213	
lin	48	FISH, G. et al., <i>Monolithic InP Optical Crossconnects: 4x4 and Beyond</i> , JWB2-1, Pg 19-21	
lin	49	FURUTA, H. et al, <i>Novel Optical Waveguide For Integrated Optics</i> , Applied Optics, VOL. 13, NO. 2, Feb. 1974, pg. 322-326	
lin	50	GINI, E. et al., <i>Low Loss-Self-Aligned Optical Waveguide Corner Mirrors in InGaAsP/InP</i> , We P2.22	
lin	51	GOEL, K. et al <i>Design Considerations for Low Switching Voltage Crossing Channel Switches</i> , Journal of Lightwave Technology, VOL 6, No.6, June 1988; pg 881-886	

Examiner Signature

lin

Date Considered

02/03/03

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two letter-code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

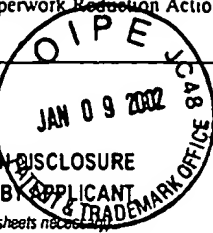
Please type a plus sign (+) inside the box ☒

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-003
U.S. Patent & Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Action of 1995, no persons are required to response to a collection of information unless it contains a valid OMB number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets necessary)		COMPLETE IF KNOWN			
		Application Number	09/724,179		
		Filing Date	11/28/00		
		First Named Inventor	Lin		
		Group Art Unit	2874		
		Examiner Name	Unknown		
SHEET	3	OF	6	Docket Number	LIGHT1320



RECEIVED
JAN 14 2002
Technology Center 2600

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Ts
lu	52	GRANESTRAND, P. et al., <i>Integrated Optics 4x4 Switch Matrix with Digital Optical Switches</i> ; Electronics Letters, VOL 26, No.1, Jan 4, 1990; pg 4-5	
lu	53	HIMENO, A. et al., <i>Loss Measurement and Analysis of High-Silica Reflection Bending Optical Waveguides</i> , Journal of Lightwave Technology, January 1988, Vol. 6-No. 1, 41-46.	
lu	54	HSU, K.Y. et al., <i>Photonics devices and Modules</i> , www.cc.nctu.edu.tw/~ctrl/ee_mt/research_topic/photonic_devices_modules.htm , pp 1-3.	
lu	55	HUANG, T.C. et al., <i>Depletion Edge Translation Waveguide Crossing Optical Switch</i> ; IEEE Photonics Technology Letters; VOL 1, No.7, Jul 1989, pg 168-170	
lu	56	HUTCHESON, L.D. et al., <i>Comparison of Bending Losses in Integrated Optical Circuits</i> ; Optics Letters, VOL 5, No.6, Jun 1980, pg 360-362	
lu	57	INOUE, H. et al., <i>Low Loss GaAs Optical Waveguides</i> , Journal of Lightwave Technology, VOL LT-3, No.6, Dec. 1985; pg 204-209	
lu	58	IRACE, A. et al., <i>Fast Silicon-on-Silicon Optoelectronic Router Based on a BMFET Device</i> , Journal of Selected Topics in Quantum Electronics, January/February 2000, Vol. 6-No. 1, pp. 14-18.	
lu	59	ITO, F. et al., <i>Carrier-Injection-Type Optical Switch In GaAs With A 1.06-1.55 μm Wavelength Range</i> ; Appl. Physics Letters, 54(2) Jan 9, 1989; pg 134-136	
lu	60	JACKMAN, N. et al., <i>Optical Cross Connects for Optical Networking</i> ; Bell Labs Technical Journal, Jan-Mar. 1999; pg 262-281	
lu	61	JOHNSTON, I.R., et al., <i>Silicon-Based Fabrication Process For Production Of Optical Waveguides</i> ; IEE Proc-Optoelectron., VOL 143, No.1, Feb 1996, pg 37-40	
lu	62	KAENKO, A. et al., <i>Athermal Silica-based Arrayed-waveguide Grating (AWG) Multiplexers with New Low Loss Groove Design</i> ; TuO1-1, pg 204-206	
lu	63	KASAHARA, R. et al., <i>Low-Power Consumption Silica-Based 2x2 Thermooptic Switch Using Trenched Silicon Substrate</i> , IEEE Photonics Technology Letters, VOL 11, No. 9, Sep 1999, pg 1132-1134	
lu	64	KHAN, M.N. et al., <i>Fabrication-Tolerant, Low-Loss, and High-Speed Digital Optical Switches in InGaAsP/InP Quantum Wells</i> ; Proc 21 st Eur. Conf. on Opt. Comm. (ECOC '95-Brussels), pg 103-106	
lu	65	KHAN, M.N. et al., <i>High-Speed Operation of Quantum Well Electron Transfer Digital Optical Switches</i> ; pg 102-102c	
lu	66	KIRIHARA, T. et al., <i>Lossless And Low Crosstalk 4x4 Optical Switch Array</i> ; Electronics And Communications In Japan, Part 2, VOL 77, No.11, 1994, pg 73-81	
lu	67	KIRIHARA, T. et al., <i>Lossless and Low-Crosstalk Characteristics in an InP-Based 2x2 Optical Switch</i> , IEEE Photonics Technology Letters, VOL 5, No. 9 Sept 1993, pg 1059-1061	
lu	68	KOKUBUN, Y. et al., <i>Athermal Waveguides for Temperature-Independent Lightwave Devices</i> , November 1993, 1297-1298, Vol. 5-NO. 11, IEEE Photonics Technology Letters.	
lu	69	KOKUBUN, Y. et al., <i>Temperature-Independent Narrowband Optical Filter at 1.3 μm Wavelength by an Athermal Waveguide</i> , 10 th October 1996, Vol. 32-No. 21, Electronics Letters	
lu	70	KOKUBUN, Y. et al., <i>Temperature-Independent Optical Filter at 1.55 μm Waveguide Using a Silica-Based Athermal Waveguide</i> , 19 February 1998, Vol. 34-No. 4, Electronics Letters	
lu	71	KOKUBUN, Y. et al., <i>Three-Dimensional Athermal Waveguides for Temperature Independent Lightwave Devices</i> , 21 st July 1994, Vol. 30-No. 15, Electronics Letters	
lu	72	KOSTRZEWA, C. et al., <i>Tunable Polymer Optical Add/Drop Filter for Multiwavelength Networks</i> , Photonics Technology Letters, November 1997, Vol. 9-No. 11, 1487-1489.	
lu	73	LAAKMAN, K. D. et al., <i>Waveguides: Characteristic Modes Of Hollow Rectangular Dielectric Waveguides</i> ; Applied Optics, VOL 15, No. 5, May 1976; pg 1334-1340.	

Examiner Signature		Date Considered	12/3/03
--------------------	--	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two letter-code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

Please type a plus sign (+) inside the box ☒

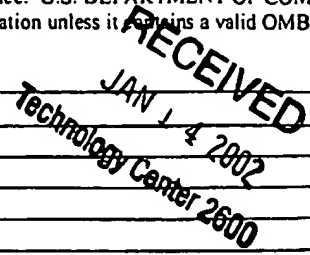
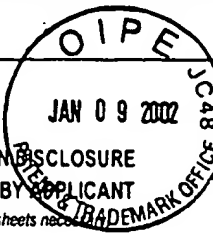
PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-003

U.S. Patent & Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Action of 1995, no persons are required to respond to a collection of information unless it carries a valid OMB number.

Substitutes for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets necessary)		COMPLETE IF KNOWN			
		Application Number	09/724,179		
		Filing Date	11/28/00		
		First Named Inventor	Lin		
		Group Art Unit	2874		
		Examiner Name	Unknown		
SHEET	4	OF	6	Docket Number	LIGHT1320



OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ⁶
lu	74	LEE, T.P. et al., <i>AlGa_{1-x}As Double-Heterostructure Rib-Waveguide Injection Laser</i> , IEEE Journal of Quantum Electronics, VOL QE-11, No.7, July 1975; pg 432-435	
lu	75	LIU, Y.L. et al., <i>Silicon 1x2 Digital Optical Switch Using Plasma Dispersion</i> , Electronics Letters, VOL 30, No.2, Jan20, 1994; pg 130-131	
lu	76	MAK, G. et al., <i>High-Speed Bulk InGaAsP-InP Electroabsorption Modulators with Bandwidth in Excess of 20 GHz</i> , IEEE Photonics Technology Letter, VOL 2, No.10, Oct 1990, pg 730-733	
lu	77	MARCATILI, E., <i>Improved Coupled-Mode Equations for Dielectric Guides</i> , IEEE Journal of Quantum Electronics, VOL QE-22, No.6, June 1986; pg 988-993	
lu	78	MARCATILI, E.A.J., <i>Bends in Optical Dielectric Guides</i> , The Bell System Technical Journal, Sep 1969; pg 2103-2132	
lu	79	MARCATILI, E.A.J., <i>Dielectric Rectangular Waveguide and Directional Coupler for Integrated Optics</i> , The Bell System Technical Journal, Sept 1969 pg 2071-2101	
lu	80	MARCATILI, E.A.J., <i>Slab-Coupled Waveguides</i> , The Bell System Technical Journal, April 1974; American Telephone & Telegraph Company, VOL 53, No.4, April 1974	
lu	81	MIRZA, A.R. et al., <i>Silicon Wafer Bonding For MEMS Manufacturing</i> , Solid State Technology, Aug 1999, pg 73-78	
lu	82	MOERMAN, I. et al., <i>A Review on Fabrication Technologies for the Monolithic Integration of Tapers with III-V Semiconductor Devices</i> , IEEE Journal of Selected Topics in Quantum electronics, VOL 3, No.6, Dec. 1997, pg 1308-1320	
lu	83	MÜLLER, G. et al., <i>First Low Loss InP/InGaAsP Optical Switch with Integrated Mode Transformers</i> , ThC12.10; Pg 37-40	
lu	84	NAYYER, J. et al., <i>Analysis of Reflection-Type Optical Switches with Intersecting Waveguides</i> , Journal of Lightwave Technology, VOL 6, No.6, June 1988; pg 1146-1152	
lu	85	NEGAMI, T. et al., <i>Guided-Wave Optical Wavelength Demultiplexer Using An Asymmetric Y Junction</i> , Appl. Phys. Lett. 54 (12), Mar 20, 1989; pg 1080-1082	
lu	86	NELSON, W. et al., <i>Optical Switching Expands Communications-Network Capacity</i> , Laser Focus World, Jun 1994, pg 517-520	
lu	87	NELSON, W.H. et al., <i>Wavelength-and Polarization-Independent Large Angle InP/InGaAsP Digital Optical Switches with Extinction Ratios Exceeding 20 dB</i> , IEEE Photonics Technology Letters, VOL 6, No.11, Nov. 1994; pg 1332-1334	
lu	88	NODA, Y. et al., <i>High-Speed Electroabsorption Modulator with Strip-Loaded GaInAsP Planar Waveguide</i> , Journal of Lightwave Technology, VOL LT-4, No.10, Oct 1986, pg 1445-1453	
lu	89	OFFREIN, B.J. et al., <i>Resonant Coupler-Based Tunable Add-After-Drop Filter in Silicon-Oxynitride Technology for WDM Networks</i> , Journal of Selected Topics in Quantum Electronics, Vol. 5-No. 5, 1400-1405.	
lu	90	OKAMOTO, K. et al., <i>Arrayed-Waveguide Grating Multiplexer With Flat Spectral Response</i> , Optics Letters, Jan 1 1995; VOL 20, No.1; Pg 43-45	
lu	91	OKAMOTO, K. et al., <i>Flat Spectral Response Arrayed-Waveguide Grating Multiplexer with Parabolic Waveguide Horns</i> , Electronics Letters Online, July 15, 1996, No. 19961120, pp. 1661-1662.	
lu	92	OKAYAMA, H. et al., <i>8x8 Ti:LiNbO₃ Waveguide Digital Optical Switch Matrix</i> , IEICE Trans. Commun.; VOL E77-B, No.2; Feb. 1994; pg 204-208	
lu	93	OKAYAMA, H. et al., <i>Dynamic Wavelength Selective Add/Drop Node Comprising Tunable Gratings</i> , Electronics Letters Online, April 10, 1997, No. 19970607.	
lu	94	OKAYAMA, H. et al., <i>Reduction of Voltage-Length Product for Y-Branch Digital Optical Switch</i> , Journal of Lightwave Technology, VOL 11, No.2, Feb 1993; pg 379-387	
lu	95	OKUNO, M. et al., <i>Strictly Nonblocking 16x16 Matrix Switch Using Silica Based Planar Lightwave Circuits</i> , VOL 10, No.266, Sep 11, 1986	
lu	96	OOBA, N. et al., <i>Athermal Silica-Based Arrayed-Waveguide Grating Multiplexer Using Bimetal Plate Temperature Compensator</i> , Electronics Letters, 12 th October 2000, Vol. 36, No. 21, pp 1800-1801	

Examiner Signature		Date Considered	12/3/03
--------------------	--	-----------------	---------

¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two letter-code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

Please type a plus sign (+) inside the box ☒

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-003

U.S. Patent & Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB number.

Substitution for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets necessary)		COMPLETE IF KNOWN			
		Application Number	09/24,179		
		Filing Date	11/28/00		
		First Named Inventor	Lin		
		Group Art Unit	2874		
Examiner Name	Unknown				
SHEET	5	OF	6	Docket Number	LIGHT1320

OTPE
JAN 09 2002
3548
U.S. PATENT & TRADEMARK OFFICE

RECEIVED
JAN 14 2002
Technology Center 2600

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ⁶
ly	97	RENAUD, M. et al., <i>Compact Digital Optical Switches for Low Insertion Loss Large Switch Arrays on InP</i> , Proc. 21 st Eur. Conf. on Opt. Comm. (ECOC '95-Brussels), pg 99-102	
ly	98	RICKMAN, A.G. et al., <i>Silicon-on-Insulator Optical Rib Waveguide Loss and Mode Characteristics</i> , Journal of Lightwave Technology, October 1994, Vol. 12-No. 10, pp 1771-1776	
ly	99	ROLLAND, C. et al., <i>10 Gbit/s, 1.56 μm, Multiquantum Well InP/InGaAsP Mach-Zehnder Optical Modulator</i> , Electronics Letters, Mar 4, 1993, VOL 29, No.5, pg 471-472	
ly	100	Santac Sales Brochure for year 2000 entitled "Optical Components"	
ly	101	SCHAUWECKER, B. et al, <i>Small-Size Silicon-Oxynitride AWG Demultiplexer Operating Around 725 nm</i> , IEEE Photonics Technology Letters, Vol. 12 No. 12, December 2000	
ly	102	SCHLACHETZKI, A. <i>Monolithic IO-Technology-Modulators and Switches Based on InP</i> , SPIE VOL 651 Integrated Optical Circuit Engineering III (1986), pg 60-86	
ly	103	SILBERBERG, Y. et al., <i>Digital Optical Switch</i> , Appl. Phys. Lett., VOL 51, No.16, Oct 19, 1987, pg 152-154	
ly	104	SMIT, M.K., <i>New Focusing and Dispersive Planar Component Based on an Optical Phased Array</i> , Electronics Letters, Mar 31, 1988, VOL 24, No.7; Pg 385-386	
ly	105	SMITH, S.D. et al., <i>CW Operation of Corner Cavity Semiconductor Lasers</i> , IEEE Photonics Technology Letters, VOL 5, No.8, Aug 1993; pg 876-879	
ly	106	SNEH, A. et al., <i>Compact Low Crosstalk and Low Propagation Loss Quantum-Well Y-Branch Switches</i> , PDP 4-1 - 4-5	
ly	107	SOOLE, J.B.D. et al., <i>Use of Multimode Interference Couplers to Broaden the Passband of Wavelength-Dispersive Integrated WDM Filters</i> , IEEE Photonics Technology Letters, VOL 8, No.10, Oct 1996; pg 1340-1342	
ly	108	STOLL, L. et al., <i>1:8 Optical Matrix Switch on InP/InGaAsP with Integrated Mode Transformers</i> , Optical Switches and Modulators II, pg 531-534	
ly	109	STOLL, L. et al., <i>Compact and Polarization Independent Optical Switch on InP/InGaAsP</i> , TuB7.2; pg 337-340	
ly	110	STUTIUS, W. et al, <i>Silicon Nitride Films On Silicon For Optical Waveguides</i> , Applied Optics, VOL 16, No.12, Dec 1977, pg 303-307	
ly	111	SUGIE, T. et al., <i>1.3-μm Laser Diodes with a Butt-jointed Selectively Grown Spot-Size Converter</i> , ThB2-6, IOOC95, pg 52-53	
ly	112	TADA, K. et al., <i>Bipolar Transistor Carrier-Injected Optical Modulator/Switch: Proposal and Analysis</i> , IEEE Electron Device Letters, VOL EDL-7, No.11, Nov 1986, pg 605-606	
ly	113	TAKADA, et al., <i>Optical Spectrum analyzer using Cascaded AWG's with Different Channel Spacings</i> , Photonics Technology Letters, July 1999, Vol. 11, No. 7, pp. 863-864.	
ly	114	TAKAHASHI, H. et al., <i>Arrayed Waveguide Grating for Wavelength Division Multi/Demultiplexer with Nanometre Resolution</i> , PWG-NTT-7	
ly	115	TAKIGUCHI, K. et al, <i>Dispersion Compensation Using a Planar Lightwave Circuit Optical Equalizer</i> , Photonics Technology Letters, April 1994, Vol. 6, No. 4, pp. 561-564.	
ly	116	TIEN, P.K. et al., <i>Formation of Light-Guiding Interconnections in an Integrated Optical Circuit by Composite Tapered-Film Coupling</i> , Applied Optics, VOL 12, No. 8, Aug 1973; pg 1909-1916	
ly	117	TOYODA et al., <i>Thermoplastic Switch and Wavelength Tunable Filter using Polymer Waveguides</i> , Abstract of paper presented at Opticomm 2001 on August 22, 2001.	
ly	118	TREYZ, G.V. et al., <i>Silicon Optical Modulators at 1.3 μm Based on Free-Carrier Absorption</i> , IEEE Electron Device Letters, VOL 12, No.6, June 1991; pg 276-278	
ly	119	TSUDA, H. et al., <i>Performance Analysis of a Dispersion Compensator Using Arrayed-Waveguide Gratings</i> , Journal of Lightwave Technology, August 2000, Vol. 18-No.8, pp 1139-1147.	

Examiner Signature	ly	Date Considered	12/3/03	Examiner Signature	
--------------------	----	-----------------	---------	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two letter-code (WIPO Standard ST.3).

⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-003

U.S. Patent & Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Action of 1995, no persons are required to response to a collection of information unless it contains a valid OMB number.

Substitute for form 1449A/PTO				COMPLETE IF KNOWN	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	09/724,179
				Filing Date	11/28/00
				First Named Inventor	Lin
				Group Art Unit	2874
				Examiner Name	Unknown
SHEET	6	OF	6	Docket Number	LIGHT1320

[illegible]

Examiner Signature	<i>ly n</i>	Date Considered	12/3/03
--------------------	-------------	-----------------	---------

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two letter-code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.